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| 10/754,012 | 01/08/2004 | Wayne Kenneth Carrigan | ROC920030319US1 | 7171 |

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IBM CORPORATION
ROCHESTER IP LAW DEPT. 917
3605 HIGHWAY 52 NORTH
ROCHESTER, MN 55901-7829

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| EXAMINER |
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DAO, THUY CHAN

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| ART UNIT | PAPER NUMBER |
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2192

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 03/21/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|------------------------|-------------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/754,012 | CARRIGAN, WAYNE KENNETH | |
| | Examiner | Art Unit | |
| | Thuy Dao | 2192 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the amendment filed on January 11, 2007.
2. Claims 1-38 have been examined.

Response to Amendments

3. Per Applicant's request, claims 34 and 37-38 have been amended.
4. The objection to the specification is withdrawn in view of Applicant's amendments.
5. The 35 USC §101 rejection over claims 34-38 is withdrawn in view of Applicant's amendments.

Response to Arguments

6. The Applicant is thanked for a thorough reply. Applicant's arguments have been considered but are moot in view of the new grounds of rejection – see paragraphs 8-9 and 11.

Claim Rejections – 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1-32 and 34-38 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 6,094,688 to Mellen-Garnett et al. (art made of record, hereinafter "Mellen-Garnett").

Claim 1:

Mellen-Garnett discloses an apparatus, a computer system, and *a method of managing a plurality of software development environments coupled to one another*

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through a cross development environment (e.g., FIG. 1, col.3: 22-67), the method comprising:

detecting an update made in a first software development environment among the plurality of software development environments (e.g., FIG. 2, blocks 103-104, col.4: 36-57); and

dynamically modifying a mapping between the first software development environment and a second software development environment among the plurality of software development environments in response to the detected update (e.g., FIG. 2, block 110, col.5: 2-11; col.7: 23-45).

Claim 2:

The rejection of claim 1 is incorporated. Mellen-Garnett also discloses *each of the first and second software development environments comprises a problem tracking tool, and wherein the mapping is configured to convert a problem report generated by the problem tracking tool in the first development environment to an acceptable format for the problem tracking tool in the second development environment (e.g., FIG. 13, Error Handler 1316, col.21: 36-67).*

Claim 3:

The rejection of claim 1 is incorporated. Mellen-Garnett also discloses *the mapping is configured to convert a source code file generated by the first development environment to an acceptable format for the second development environment (e.g., FIG. 3, Data Transformation 246, Rules Engine 244, col.6: 5-22).*

Claim 4:

The rejection of claim 1 is incorporated. Mellen-Garnett also discloses *detecting the update comprises receiving a notification from the first software development environment (e.g., FIG. 7, block 700, col.11: 35-41).*

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Claim 5:

The rejection of claim 1 is incorporated. Mellen-Garnett also discloses *notifying an administrator of the cross development environment in response to detecting the update* (e.g., FIG. 1, Admin 50 and Applications 1-4, col.3: 22-40, col.4: 29-35).

Claim 6:

The rejection of claim 1 is incorporated. Mellen-Garnett also discloses *notifying an administrator of the second software development environment in response to detecting the update* (e.g., col.3: 22-40, col.4: 29-35).

Claim 7:

The rejection of claim 6 is incorporated. Mellen-Garnett also discloses *updating the second software development environment in response to notification of the administrator* (e.g., FIG. 2, block 110, col.5: 2-11).

Claim 8:

The rejection of claim 1 is incorporated. Mellen-Garnett also discloses *the update comprises an update to content stored in the first software development environment* (e.g., FIG. 2, blocks 103-105, col.4: 36-67).

Claim 9:

The rejection of claim 8 is incorporated. Mellen-Garnett also discloses *the update comprises an update to at least one of a product, component and release stored in a library repository in the first software development environment* (e.g., FIG. 5, col.8: 13-36).

Claim 10:

The rejection of claim 1 is incorporated. Mellen-Garnett also discloses *the update comprises an update to at least one of a tool, a parameter and a value in the first software development environment (e.g., FIG. 5, col.8: 28-50).*

Claim 11:

The rejection of claim 1 is incorporated. Mellen-Garnett also discloses *the mapping is defined in a mapping data structure comprising a plurality of mapping entries, wherein at least one mapping entry includes a wildcard (e.g., FIG. 12, block 1228/YES).*

Claim 12:

The rejection of claim 1 is incorporated. Mellen-Garnett also discloses *transforming a transaction generated by the first software development environment into a format compatible with the second software development environment using the mapping (e.g., FIG. 2, blocks 109-110, col.5: 2-11).*

Claim 13:

The rejection of claim 12 is incorporated. Mellen-Garnett also discloses *transforming the transaction includes routing the transaction to one of a plurality of cross development environment processes (e.g., FIG. 1, Applications 1-4, col.4: 29-35).*

Claim 14:

The rejection of claim 13 is incorporated. Mellen-Garnett also discloses *routing the transaction is performed by a router process, the router process configured to perform at least one of failover and load balancing in connection with routing the transaction to a cross development environment process (e.g., FIG. 1, Application Collaboration components 40, col.4: 1-18).*

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Claim 15:

The rejection of claim 12 is incorporated. Mellen-Garnett also discloses *transforming the transaction includes communicating the transaction to the second software development environment, the method further comprising retrying communication of the transaction to the second software development environment in response to unavailability of the second software development environment (e.g., FIG. 8, block 804, col.12: 18-35).*

Claim 16:

Mellen-Garnett also discloses an apparatus, a computer system, and a *method of managing a plurality of software development environments coupled to one another through a cross development environment (e.g., FIG. 1, col.3: 22-67), the method comprising:*

updating a first software development environment among the plurality of software development environments (e.g., FIG. 2, blocks 103-104, col.4: 36-57); and

notifying the cross development environment of the update made in the first software development environment in response to the update (e.g., FIG. 7, block 700, col.11: 35-41; FIG. 2, block 110, col.5: 2-11).

Claim 17:

The rejection of claim 16 is incorporated. Mellen-Garnett also discloses *dynamically modifying a mapping between the first software development environment and a second software development environment among the plurality of software development environments in response to notification of the cross development environment (e.g., col.7: 23-45).*

Claim 18:

The rejection of claim 16 is incorporated. Mellen-Garnett also discloses *dynamically notifying an administrator in response to the update* (e.g., FIG. 1, Admin 50, col.3: 22-40).

Claims 19-32:

Claims 19-32 are apparatus versions, which recite the same limitations as those of claims 1-15, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claims 19-32.

Claims 34-36:

Claims 34-36 are computer system versions, which recite the same limitations as those of claims 16-18, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claims 34-36.

Claims 37-38:

Claims 37-38 are apparatus versions, which recite the same limitations as those of claims 1 and 19, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claims 37-38.

9. Claims 1, 16, 19, 34, and 37 are rejected under 35 U.S.C. 102(b) as being anticipated by "Business process integration with IBM CrossWorlds, Part 1: Introduction to collaboration development" to Cutlip, published in May 2002 (hereinafter "Cutlip").

Claim 1:

Cutlip discloses an apparatus, a computer system, and *a method of managing a plurality of software development environments coupled to one another through a*

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cross development environment (e.g., page 2, Figure 1 and related text in lines 1-18), the method comprising:

detecting an update made in a first software development environment among the plurality of software development environments (e.g., page 3, Figure 2, update as Application Specific Business Objects transformed between Applications A and B, related text in page 2: 8-11); and

dynamically modifying a mapping between the first software development environment and a second software development environment among the plurality of software development environments in response to the detected update (e.g., page 3, Figure 2, Maps components in Interchange Server, related text in page 2: 12-14).

Claim 16:

Mellen-Garnett also discloses an apparatus, a computer system, and a *method of managing a plurality of software development environments coupled to one another through a cross development environment (e.g., page 2, Figure 1 and related text in lines 1-18), the method comprising:*

updating a first software development environment among the plurality of software development environments (e.g., page 3, Figure 2, update as Application Specific Business Objects transformed between Applications A and B, related text in page 2: 8-11); and

notifying the cross development environment of the update made in the first software development environment in response to the update (e.g., page 2, Figure 1, the cross development environment as the Interchange Server comprising Central Repository for storing metadata associated with updates, Connectors for detecting and routing updates between Applications A and B, related text in page 1: 1-30).

Claim 19:

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Claim 19 is an apparatus version, which recites the same limitations as those of claim 1, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 19.

Claim 34:

Claim 34 is a computer system version, which recites the same limitations as those of claims 16-18, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claim, it also teaches all of the limitations of claim 34.

Claim 37:

Claim 37 is an apparatus version, which recites the same limitations as those of claims 1 and 19, wherein all claimed limitations have been addressed and/or set forth above. Therefore, as the reference teaches all of the limitations of the above claims, it also teaches all of the limitations of claim 37.

Claim Rejections – 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claim 33 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mellen-Garnett in view of US Patent No. 5,574,917 to Good et al. (art made of record, hereinafter "Good").

Claim 33:

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Mellen-Garnett discloses *an apparatus, comprising:*

a memory configured to store a mapping data structure for use in a cross development environment that couples together a plurality of software development environments; a processor (e.g., FIG. 1, col.3: 22-67; FIG. 2, blocks 103-104, col.4: 36-57); and

program code configured to transform a transaction generated by a first software development environment among the plurality of software development environments into a format compatible with a second software development environment among the plurality of software development environments using the mapping data structure (e.g., FIG. 2, block 110, col.5: 2-11, col.7: 23-45).

Mellen-Garnett does not explicitly disclose the mapping data structure includes at least *one wildcarded field*.

However, in an analogous art, Good further discloses the mapping data structure includes at least *one wildcarded field* (e.g., col.5: 34-48).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to combine the teaching of Good into that of Mellen-Garnett. One would have been motivated to do so to provide a rapid and flexible method of transferring information between multiple application programs as suggested by Good (e.g., col.2: 30-67; col.5: 16-33).

Conclusion

12. Any inquiry concerning this communication should be directed to examiner Thuy Dao (Twee), whose telephone is (571) 272 8570. The examiner can normally be reached on Monday, Tuesday, Thursday, and Friday from 6:00AM to 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273 8300.

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Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

T. Dao



TUAN DAM
SUPERVISORY PATENT EXAMINER